

SPINIFEX RESIN.

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Last year Sir William Macleay was kind enough to give me "a sample of gum used by the blacks for cementing the heads of spears,* and prepared from Spinifex roots," which had been collected by Mr. Walter Froggatt in the Napier Range (locally called Barrier Range), 100 miles inland from Derby, North-west Australia.

I was dubious as to it being the product of a "Spinifex," never having heard of a grass yielding a resin, but Mr. Froggatt is emphatic that he is not mistaken, nor is so experienced a collector likely to be. The Spinifex is probably *Triodia irritans*, R.Br., but further information on the subject, giving the mode of preparation of the resin would be very acceptable. Mr. Froggatt states that it is obtained from the roots, and local Europeans and aborigines all make similar statements as to its origin.

It is in a cake about 4 inches in diameter, and $1\frac{1}{4}$ inch in thickness. The smell is something like beeswax, but at the same time it has an exceedingly disagreeable and persistent odour which is not easily described. It reminds one of the smell of the fabric known as corduroy. It is of especial interest because it is of aboriginal preparation. Its colour is that of a dirty dark bronze-green, or almost of a slaty colour with a little green in it. To the naked eye it looks very like finely chopped hay or grass-seed cemented into a compact mass. It is exceedingly tough, a sharp blow with a hammer on a cold chisel being necessary to fracture it.

*"The heads of spears from Western Australia in my collection are coated with a hard gum, forming a ridge on one side, in which pieces of glass are impacted." Brough Smyth's *Aborigines of Victoria*, &c., i., 336. Mr. Froggatt informs me that Spinifex resin is put to such a purpose in the locality from which he obtained it.

Petroleum spirit extracts 3·2 per cent. of a transparent, colourless fixed oil or fat, which possesses a little of the disagreeable odour of the original substance. The solvent extracts no resin. As the substance has been made up into cakes by the blacks, and is to that extent not an absolutely natural product, it may be that the fat, or a portion of it, has been introduced.

The substance was then digested in alcohol, which extracts a transparent, hard, golden-yellow resin possessing some odour, and which appears to be an interesting substance. The amount of this resin is 67·3 per cent., and it darkens on keeping.

Water digested on the residue dissolves out 6·9 per cent. of colouring matter and salts. It contains no arabin. The remainder, 23·1 per cent., consists of dirt and particles of chopped grass. This also is quite free from gummy matter.

Summary :—

Fat, soluble in petroleum spirit.....	3·1
Resin, soluble in alcohol.....	67·3
Extractive and salts, soluble in water....	6·9
Accidental impurity	23·1
	100·4

A second sample, treated with alcohol direct, yielded 70·8 per cent. to that solvent.